1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
  - Trade name: Dextran Sulfate Sodium Salt
  - Article number: 160110
  - CAS Number: 9011-18-1
  - Relevant identified uses of the substance or mixture and uses advised against
    - No further relevant information available.
  - Application of the substance / the mixture
    - Research use only.

- Details of the supplier of the safety data sheet
  - Further information obtainable from: Quality Control Department
  - Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazards identification

- Classification of the substance or mixture
  - The substance is not classified according to the Globally Harmonised System (GHS).

- Label elements
  - GHS label elements Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterisation: Substances
- CAS No. Description
  9011-18-1 Dextran Sodium Sulfate, MW = 36,000-50,000

4 First aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.

- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    - No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    - No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
Trade name: Dextran Sulfate Sodium Salt

- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Advice for firefighters**: No special measures required.
- **Protective equipment**: No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**: Not required.
- **Environmental precautions**: Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up**: Pick up mechanically.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

### 7 Handling and storage

- **Handling**
  - **Precautions for safe handling**: No special measures required.
  - **Information about fire - and explosion protection**: No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**: 15-30°C
  - **Requirements to be met by storerooms and receptacles**: No special requirements.

- **Further information about storage conditions**
  - **Specific end use(s)**: No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities**: No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace**: Not required.

- **Additional information**: The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment**
  - **General protective and hygienic measures**: The usual precautionary measures are to be adhered to when handling chemicals.
  - **Respiratory protection**: Not required.
  - **Protection of hands**: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    - **Material of gloves**: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
    - **Penetration time of glove material**: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Trade name: Dextran Sulfate Sodium Salt

- Eye protection: Not required.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Powder
      - Colour: Off-White
    - Odour: Indeterminate
    - Odour threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/freezing point: Undetermined.
    - Initial boiling point and boiling range: Undetermined.
  - Flash point: Not applicable.
  - Flammability (solid, gas): Product is not flammable.
  - Decomposition temperature: Not determined.
  - Auto-ignition temperature: Not determined.
  - Explosive properties: Product does not present an explosion hazard.
    - Explosion limits:
      - Lower: Not determined.
      - Upper: Not determined.
  - Vapour pressure: Not applicable.
  - Density:
    - Relative density: Not determined.
    - Vapour density: Not applicable.
    - Evaporation rate: Not applicable.
    - Solubility in / Miscibility with
      - water at 25 °C: 100 g/l Easily soluble.
  - Partition coefficient: n-octanol/water: Not determined.
  - Viscosity:
    - Dynamic: Not applicable.
    - Kinematic: Not applicable.
  - Solvent content:
    - VOC (EC): 0.00 %
  - Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Trade name: Dextran Sulfate Sodium Salt

11 Toxicological information

- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
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<tbody>
<tr>
<td>9011-18-1 Dextran Sodium Sulfate, MW = 36,000-50,000</td>
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<tr>
<td>Oral LD50</td>
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- **Acute toxicity**: Based on available data, the classification criteria are not met.

- **Skin corrosion/irritation**: No irritant effect.
- **Serious eye damage/irritation**: No irritating effect.
- **Respiratory or skin sensitisation**: No sensitising effects known.
- **Additional toxicological information**: When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behaviour in environmental systems**:
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.
- **Additional ecological information**:
  - **General notes**: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**
  - **PBT**: Not applicable.
  - **vPvB**: Not applicable.
  - **Other adverse effects**: No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**: Smaller quantities can be disposed of with household waste.

- **Uncleaned packaging**:
  - **Recommendation**: Disposal must be made according to official regulations.
  - **Recommended cleansing agents**: Water, if necessary together with cleansing agents.
14 Transport information

- UN-Number
  - ADR, IMDG, IATA: Not regulated

- UN proper shipping name
  - ADR, IMDG, IATA: Not regulated

- Transport hazard class(es)
  - ADR, IMDG, IATA: Not regulated
  - Class: Not regulated

- Packing group
  - ADR, IMDG, IATA: Not regulated

- Environmental hazards:
  - Not applicable.

- Special precautions for user
  - Not applicable.

- Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.

- UN "Model Regulation":
  - Not regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - GHS label elements: Void
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void

- Directive 2012/18/EU

- Named dangerous substances - ANNEX I Substance is not listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Quality Control Dept.

- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative